UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/071,124	02/07/2002	John M. Pczzuto	7500-0004.10	2746

23980 7590 04/26/2004

REED & EBERLE LLP
800 MENLO AVENUE, SUITE 210
MENLO PARK, CA 94025

EXAMINER	
JONES, DWAYNE C	

ART UNIT	PAPER NUMBER
1614	

DATE MAILED: 04/26/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/071,124	PEZZUTO ET AL.	
	Examiner	Art Unit	
	Dwayne C Jones	1614	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *02 February 2004*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *68-77,84-87 and 92-99* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *68-77,84-87 and 92-99* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☒ Certified copies of the priority documents have been received in Application No. 09/005,114.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Status of Claims

1. Claims 68-77, 84-87, and 92-99 are pending.

2. Claims 68-77, 84-87, and 92-99 are rejected.

3. Claims 78-83 and 88-91 are canceled as per the amendment of February 2, 2004.

Response to Arguments

4. Applicants' arguments filed February 2, 2004 have been fully considered but they are not persuasive. Applicants present the following arguments. First, applicants allege that Carson et al. and Ashida et al. do not teach nor suggest resveratrol disclosed therein maybe administered orally or parenterally as a microemulsion for the inhibition of cellular events associated with tumor initiation.

5. First, applicants allege that Carson et al. and Ashida et al. do not teach nor suggest resveratrol disclosed therein maybe administered orally or parenterally as a microemulsion for the inhibition of cellular events associated with tumor initiation. Applicants also purport that Carson et al. teaches the use for resveratrol for topical application rather than oral or parenteral administration as disclosed by applicants' invention.

6. However, the instantly filed claims are composition claims of resveratrol and emollients, the prior art references of Carson et al. and Ashida et al., which also teach of composition claims that contain the very same compound of resveratrol as well as emollients, do in fact render the instant obvious. In addition, Carson et al. also teach of

topical formulations that include resveratrol. Applicant attempts to limit the independent claims with the incorporation of an intended use recitation. Moreover, a recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. In a claim drawn to a process of making, the intended use must result in a manipulative difference as compared to the prior art. See *In re Casey*, 152 USPQ 235 (CCPA 1967) and *In re Otto*, 136 USPQ 458, 459 (CCPA 1963). The instant claims are composition claims, which contain resveratrol and emollients for topical use. The prior art references of Carson et al. and Ashida et al. teach of composition claims that contain the very same compound of resveratrol as well as emollients. Furthermore, Carson et al. also teach of topical formulations that include resveratrol. For these reasons and the reasons of record, the instant claims are rejected under 35 U.S.C. 103(a) as being unpatentable over Carson et al. of U.S. Patent No. 6,270,780 and also under 35 U.S.C. 103(a) as being unpatentable over Ashida of JP 4093288410 A, which has a publication date of December 22, 1997, are maintained.

Claim Rejections - 35 USC § 112

7. The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

8. The rejection of claims 68-77, 84-87, 92, and 94-99 are rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for treating skin conditions, diseases, disorders associated with inflammation of psoriasis, contact dermatitis, atopic dermatitis, actinic keratosis, keratinization disorders, epidermolysis bullosa diseases, exfoliative dermatitis, seborrheic dermatitis, erythemas, discoid lupus erythematosus, dermatomyositis, does not reasonably provide enablement for treating other types of skin conditions, diseases, disorders associated with inflammation, including skin cancer as well as inhibiting cellular events associated with tumor initiation, promotion, and progression. The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make the invention commensurate in scope with these claims.

The factors to be considered in determining whether a disclosure meets the enablement requirement of 35 U.S.C. 112, first paragraph, have been described in In re Wands, 8 USPQ2d 1400 (Fed. Cir. 1988). Among these factors are: (1) the nature of the invention; (2) the state of the prior art; (3) the relative skill of those in the art; (4) the predictability or unpredictability of the art; (5) the breadth of the claims; (6) the amount of direction or guidance presented; (7) the presence or absence of working examples; and (8) the quantity of experimentation necessary. When the above factors are weighed, it is the examiner's position that one skilled in the art could not practice the invention without undue experimentation.

(1) The nature of the invention:

The instant invention is directed to pharmaceutical compositions of resveratrol that are used in the treatment of skin conditions, diseases, disorders associated with inflammation, namely psoriasis, contact dermatitis, atopic dermatitis, actinic keratosis, keratinization disorders, epidermolysis bullosa diseases, exfoliative dermatitis, seborrheic dermatitis, erythemas, discoid lupus erythematosus, dermatomyositis.

(2) The state of the prior art

The compounds of the inventions are pharmaceuticals compositions of resveratrol. However, the prior art does not teach that these compositions possess these types of properties, see Carson et al. of U.S. Patent No. 6,270,780. In addition, Internal Medicine, 4th Edition, Editor-in-Chief Jay Stein, Chapters 71-72, pages 699-715, teaches that the various types of cancers have different causative agents, involve different cellular mechanisms, and, consequently, differ in treatment protocol.

(3) The relative skill of those in the art

The relative skill of those in the art of pharmaceuticals is high.

(4) The predictability or unpredictability of the art

The unpredictability of the pharmaceutical art is very high. In fact, the courts have made a distinction between mechanical elements function the same in different circumstances, yielding predictable results, chemical and biological compounds often react unpredictably under different circumstances. Nationwide Chem. Corp. v. Wright,

458 F. Supp. 828, 839, 192 USPQ 95, 105(M.D. Fla. 1976); Aff'd 584 F.2d 714, 200 USPQ 257 (5th Cir. 1978); In re Fischer, 427 F.2d 833, 839, 166 USPQ 10, 24 (CCPA 1970). Thus, the physiological activity of a chemical or biological compound is considered to be an unpredictable art. For example, in Ex Parte Sudilovsky, the Court held that Appellant's invention directed to a method for preventing or treating a disease known as tardive dyskinesia using an angiotensin converting enzyme inhibitor involved unpredictable art because it concerned the pharmaceutical activity of the compound. 21 USPQ2d 1702, 1704-5 (BDAI 1991); In re Fisher, 427 F.2d 1557, 1562, 29 USPQ, 22 (holding that the physiological activity of compositions of adrenocorticotropic hormones was unpredictable art0; In re Wright, 999 F.2d 1557, 1562, 29 USPQ d, 1570, 1513-14 (Fed. Cir. 1993) (holding that the physiological activity of RNA viruses was unpredictable art); Ex Parte Hitzeman, 9 USPQ2d 1821, 1823 (BDAI 1987); Ex Parte Singh, 17 USPQ2d 1714, 1715, 1716 (BPAI 1990). Likewise, the physiological or pharmaceutical activity of resveratrol for the treatment of skin conditions, diseases, disorders associated with inflammation as well as inhibiting cellular events associated with tumor initiation, promotion, and progression are not supported in the instant specification other than with psoriasis, contact dermatitis, atopic dermatitis, actinic keratosis, keratinization disorders, epidermolysis bullosa diseases, exfoliative dermatitis, seborrheic dermatitis, erythemas, discoid lupus erythematosus, dermatomyositis.

(5) The breadth of the claims

The instant claims are very broad. For instance, claim 68 is directed to the topical pharmaceutical compositions of resveratrol that are used in the treatment of skin conditions, diseases, disorders associated with inflammation as well as inhibiting cellular events associated with tumor initiation, promotion, and progression. The breadth of claims was a factor in Amgen v. Chugai Pharm. Co., 927 F.2d 1200, 18 USPQ2d (Fed. Cir.),cert. Denied, 502 U.S. 856 (1991). In the Amgen case, the patent claims were directed to DNA sequences that encoded amino acid sequences. Because a very small change in the amino acid sequence of a protein can result in a very large change in the structure-function activity of a protein and because the laws of protein folding are in such a primitive state, predicting protein structure (and hence, activity) while knowing only the sequence of the protein is akin to predicting the weather for a date in the future.

The cancer therapy art remains highly unpredictable, and no example exists for the efficacy of a single product against tumors generally. Specifically, Internal Medicine, 4th Edition, Editor-in-Chief Jay Stein, Chapters 71-72, pages 699-715, teaches that the various types of cancers have different causative agents, involve different cellular mechanisms, and, consequently, differ in treatment protocol. It is also known that certain tumors are dependent upon estrogen for their induction or stimulation (e.g. breast tumors) and others are not.

(6) The amount of direction or guidance presented

The amount of guidance or direction needed to enable the invention is inversely related to the degree of predictability in the art. In re Fisher, 839, 166 USPQ 24. Thus, although a single embodiment may provide broad enablement in cases involving predictable factors, such as mechanical or electrical elements, in cases involving unpredictable factors, such as most chemical reactions and physiological activity, more teaching or guidance is required. In re Fischer, 427 F.2d 839, 166 USPQ 24; Ex Parte Hitzeman, 9 USPQ 2d 1823. For example, the Federal Circuit determined that, given the unpredictability of the physiological activity of RNA viruses, a specification requires more than a general description and a single embodiment to provide an enabling disclosure for a method of protecting an organism against RNA viruses. In re Wright, 999 F.2d 1562-63, 27 USPQ2d 1575. The specification provides no guidance, in the way of enablement for pharmaceutical compositions of resveratrol that are used in the treatment of skin conditions, diseases, disorders associated with inflammation as well as inhibiting cellular events associated with tumor initiation, promotion, and progression other than employing these topical pharmaceutical compositions for the treatment of skin conditions, diseases, disorders associated with inflammation of psoriasis, contact dermatitis, atopic dermatitis, actinic keratosis, keratinization disorders, epidermolysis bullosa diseases, exfoliative dermatitis, seborrheic dermatitis, erythemas, discoid lupus erythematosus, dermatomyositis. In re Fisher, 427 F.2d 833, 166 USPQ 18 (CCPA 1970) (contrasting mechanical and electrical elements with chemical reactions and physiological activity). See also In re Wright, 999 F.2d 1557, 27 USPQ2d 1510 (Fed. Cir. 1993); In re Vaeck, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991). This is

because it is not obvious from the disclosure of one species, what other species will work. In re Dreshfield, 110 F.2d 235, 45 USPQ 36 (CCPA 1940), gives this general rule: "It is well settled that in cases involving chemicals and chemical compounds, which differ radically in their properties it must appear in an applicant's specification either by the enumeration of a sufficient number of the members of a group or by other appropriate language, that the chemicals or chemical combinations included in the claims are capable of accomplishing the desired result." The article "Broader than the Disclosure in Chemical Cases," 31 J.P.O.S. 5, by Samuel S. Levin covers this subject in detail. A disclosure should contain representative examples, which provide reasonable assurance to one skilled in the art that the compounds fall within the scope of a claim will possess the alleged activity. See In re Riat et al. (CCPA 1964) 327 F2d 685, 140 USPQ 471; In re Barr et al. (CCPA 1971) 444 F 2d 349, 151 USPQ 724.

(7) The presence or absence of working examples

As stated above, the specification discloses topical pharmaceutical formulations of resveratrol that are useful in the treatment of skin conditions, diseases, disorders associated with inflammation as well as inhibiting cellular events associated with tumor initiation, promotion, and progression. However, the instant specification only has enablement for the treatment of skin conditions, diseases, disorders associated with inflammation for psoriasis, contact dermatitis, atopic dermatitis, actinic keratosis, keratinization disorders, epidermolysis bullosa diseases, exfoliative dermatitis, seborrheic dermatitis, erythemas, discoid lupus erythematosus, dermatomyositis.

In addition, applicant has provided no guidance or working examples teaching one skilled in the art how to determine which of the countless products used in claim(s) would be effective against skin cancer. As evidenced by the references noted above, one would not expect all of the compounds of the instant invention to be effective against all tumors.

(8) The quantity of experimentation necessary

The quantity of experimentation needed to be performed by one skilled in the art is yet another factor involved in the determining whether "undue experimentation" is required to make and use the instant invention. "'The test is not merely quantitative, since a considerable amount of experimentation is permissible, if it is merely routine, or if the specification in question provides a reasonable amount of guidance with respect to the direction in which the experimentation should proceed.'" In re Wands, 858 F.2d 737, 8 USPQ2d 1404 (citing In re Angstadt, 537 F.2d 489, 502-04, 190 USPQ 214, 218 (CCPA 1976)). For these reasons, one of ordinary skill in the art would be burdened with undue "painstaking experimentation study" to determine how these topical pharmaceutical formulations of resveratrol that would be enabled in this specification.

Therefore, based on the unpredictable nature of the invention and state of the prior art, the lack of guidance and working examples, and the extreme breadth of the claims, one skilled in the art could not use the entire scope of the claimed invention without undue experimentation.

9. Claims 68-77, 84-87, 92, and 94-99 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter, which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

10. *Regents of the University of California v. Eli Lilly & Co.., 119 F.3d 1559, 1568 (Fed. Cir. 1997), cert. denied, 523 U.S. 1089, 118 S.Ct. 1548 (1980),* holds that an adequate written description requires a precise definition, such as by structure, formula, chemical name, or physical properties, "not a mere wish or plan for obtaining the claimed chemical invention." *Eli Lilly, 119 F.3d at 1566.* The Federal Circuit has adopted the standard set forth in the Patent and Trademark Office ("PTO") Guidelines for *Examination of Patent Applications Under the 35 U.S.C. 112, 1 "Written Description" Requirement ("Guidelines"), 66 Fed. Reg. 1099 (Jan. 5, 2001),* which state that the written description requirement can be met by "showing that an invention is complete by disclosure of sufficiently detailed, relevant identifying characteristics, "including, inter alia, "functional characteristics when coupled with a known or disclosed correlation between function and structure...." *Enzo Biochem, Inc. v. Gen-Probe., 296 F.3d, 316, 1324-25 (Fed. Cir. 2002)* (quoting Guidelines, 66 Fed. Reg. At 1106 (emphasis added)). Moreover, although *Eli Lilly* and *Enzo* were decided within the factual context of DNA sequences, this does not preclude extending the reasoning of those cases to chemical structures in general. *Univ. of Rochester v. G.D. Searle & Co., 249 F. Supp.2d 216, 225 (W.D.N.Y 2003).*

11. There is insufficient descriptive support for the phrases "treating skin conditions, disorders, and disease associated with inflammation" and "inhibiting cellular events associated with tumor initiation, promotion, and progression". In addition, the instant specification does not describe what is meant by the phrases "treating skin conditions, disorders, and disease associated with inflammation" and "inhibiting cellular events associated with tumor initiation, promotion, and progression". Structural identifying characteristics of the phrases "treating skin conditions, disorders, and disease associated with inflammation" and "inhibiting cellular events associated with tumor initiation, promotion, and progression" are not disclosed. There is no evidence that there is any per se structure/function relationship between the phrases "treating skin conditions, disorders, and disease associated with inflammation" and "inhibiting cellular events associated with tumor initiation, promotion, and progression". The instant specification does provide an adequate written description for the phrases "treating skin conditions, disorders, and disease associated with inflammation" and "inhibiting cellular events associated with tumor initiation, promotion, and progression". Accordingly, these claims fail to comply with the written description requirement.

Claim Rejections - 35 USC § 102

12. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

13. The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

14. Claims 68, 84-87, 92-95, 98, and 99 are rejected under 35 U.S.C. 102(e) as being clearly anticipated by Carson et al. of U.S. Patent No. 6,270,780, possessing an effective filing date of July 25, 19971997 is maintained and repeated for both the above-stated and reasons of record. Carson et al. teach of topical compositions of resveratrol in amounts ranging from about 0.0002 to about 10 % by weight of the composition, (see column 4, lines 13-15). Carson et al. also teach of using various types of emollients such as polyethylene glycol as well as various other types of emollients, (see from column 5, line 49 to column 6, line 37). Carson et al. also teach of the presence of polyols, (see column 4, lines 28-33), silicone compounds (see column 5, lines 49-54), water (see column 4, lines 26, and 44-49), and propylene glycol, (column 6, line 5). Carson et al. also teach that these compounds may be formulated in lotions, creams or even a gel, (see column 6, lines 50-63). Accordingly, Carson et al. provides the skilled artisan with the motivation to vary the amounts as well as the excipients in the topical formulation disclosed by Carson et al. Moreover, a recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior

art. If the prior art structure is capable of performing the intended use, then it meets the claim. In a claim drawn to a process of making, the intended use must result in a manipulative difference as compared to the prior art. See *In re Casey*, 152 USPQ 235 (CCPA 1967) and *In re Otto*, 136 USPQ 458, 459 (CCPA 1963).

> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

15. Claims 68 and 92 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Hou, R. of CN 127070 A of July 24, 1996. Hou, R. teaches of a composition that contains resveratrol. Hou, R. also teaches that the resveratrol may be administered orally, (see abstract).

Claim Rejections - 35 USC § 103

16. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

17. The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

18. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

19. The rejection of claims 68-77, 84-87, and 92-99 under 35 U.S.C. 103(a) as being unpatentable over Carson et al. of U.S. Patent No. 6,270,780, possessing an effective filing date of July 25, 19971997 is maintained and repeated for both the above-stated and reasons of record. Carson et al. teach of topical compositions of resveratrol in amounts ranging from about 0.0002 to about 10 % by weight of the composition, (see column 4, lines 13-15). Carson et al. also teach of using various types of emollients such as polyethylene glycol as well as various other types of emollients, (see from column 5, line 49 to column 6, line 37). Carson et al. also teach of the presence of polyols, (see column 4, lines 28-33), silicone compounds (see column 5, lines 49-54), water (see column 4, lines 26, and 44-49), and propylene glycol, (column 6, line 5). Carson et al. also teach that these compounds may be formulated in lotions, creams or even a gel, (see column 6, lines 50-63). Carson et al. also teach that these compounds may be formulated in lotions, creams or even a gel, (see column 6, lines 50-63). The instant composition differs in the specific range of dosages claimed. The determination

of a dosage having the optimum therapeutic index is well within the purview of the skilled artisan in the art, and the artisan would be motivated to determine optimum amounts to get the maximum effect of the drug. Accordingly, Carson et al. provides the skilled artisan with the motivation to vary the amounts as well as the excipients in the topical formulation disclosed by Carson et al. Moreover, a recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. In a claim drawn to a process of making, the intended use must result in a manipulative difference as compared to the prior art. See *In re Casey*, 152 USPQ 235 (CCPA 1967) and *In re Otto*, 136 USPQ 458, 459 (CCPA 1963).

20. The rejection of claims 68-77, 84-87, and 92-99 under 35 U.S.C. 103(a) as being unpatentable over Ashida of JP 4093288410 A, which has a publication date of December 22, 1997 is maintained and repeated for both the above-stated and reasons of record. Ashida discloses of a cosmetic formulation, which contains resveratrol in amounts ranging from about 0.001 to 5 wt. %, (see abstract). Although Ashida may be silent to the derivatives of resveratrol as well as the specific pharmaceutically acceptable excipients and emollients, it is well within the level of the skilled artisan to determine optimum amounts of the active ingredient and also with the types and amounts of the pharmaceutically acceptable excipients, diluents, emollients, etc., The determination of a dosage having the optimum therapeutic index is well within the purview of the skilled artisan in the art, and the artisan would be motivated to determine

optimum amounts to get the maximum effect of the drug. Accordingly, the skilled artisan is provided with the motivation to vary the amounts as well as the excipients in the topical formulation disclosed by Ashida. Moreover, a recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. In a claim drawn to a process of making, the intended use must result in a manipulative difference as compared to the prior art. See *In re Casey*, 152 USPQ 235 (CCPA 1967) and *In re Otto*, 136 USPQ 458, 459 (CCPA 1963).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to D. C. Jones whose telephone number is (571) 272-0578. The examiner can normally be reached on Mondays, Tuesdays, Thursday, and Fridays from 8:30 am to 6:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Marianne Seidel, may be reached at (571) 272-0584. The official fax No. for correspondence is (703) 872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications may be obtained from Private PAIR only. For more information about PAIR system, see http://pair-direct.uspto.gov Should

you have any questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll free).

DWAYNE JONES
PRIMARY EXAMINER
Tech. Ctr. 1614
April 22, 2004